Q. State your name and address.

A. Gerald Charles Hartman, P.E., BCEE, ASA, GAI Consultants, Inc., 301 E. Pine Street, Suite 500, Orlando, Florida 32801.

Q. By whom and in what capacity are you employed?

A. I am a Vice President in the firm of GAI Consultants, Inc., which specializes in the field of private utility regulation. I have been retained by the City of Tega Cay to analyze the application of Tega Cay Water Service, Inc. (TCWS) for increased rates and charges for its water and wastewater systems.

Q. Mr. Hartman, are you a registered professional engineer in the State of South Carolina?

A. Yes. My registration number is 15389.

Q. Mr. Hartman, do you possess additional certifications?

A. Yes, I am also an Accredited Senior Appraiser specializing in utilities, certification number 7542.

Q. Mr. Hartman, what is your area of specialty at GAI Consultants, Inc.?

A. I specialize primarily in water and wastewater utility matters.

Q. Do you have a designation beyond your professional engineer's license and appraiser certification?

A. Yes. I am a Board Certified Environmental Engineer in the American Academy of Environmental Engineers with the water and wastewater specialty designation.

Q. Have you been accepted as an expert witness in rate proceedings

before state regulatory commissions?

A. Yes.

Q. How many times?

A. Approximately 20 or so times. See Exhibit GCH-1.

Q. Do you have an Exhibit that describes your qualifications?

A. Yes. Exhibit GCH-1, attached to my testimony, is my resume, which was prepared generally for that purpose.

Q. How is your testimony organized?

A. My testimony is organized into seven sections. In the first section, I give a brief background of the instant proceeding. In the second section, I discuss expense adjustments due to inflation / price indexing, and show why expenses must be reduced from those presented in the application filing. In the third section, I discuss my analysis related to non-account water and excessive water loss. In the fourth section, I address excessive inflow and infiltration within the system, and recommend reducing associated expenses accordingly.

In the fifth section, I address pro forma capital improvements and their impact on the rate base. Sixth, I deal with calculations of return on rate base / return on equity. I discuss a reasonable basis as well as present a logical methodology for calculating the proper percentage needed, which is lower than that presented by TCWS. Finally, in the seventh section, I combine all my recommendations to present a revenue requirement.

Q. Do you have Exhibits in support of your testimony?

A. Yes.

Exhibit GCH-2 contains ten (10) schedules that support my testimony throughout. Exhibit GCH-3 is a Florida Public Service Commission (FPSC) order related to the consumer price index, which I reference in Section II of my testimony. Exhibit GCH-4 contains excerpts from the Sur-rebuttal Testimony of Willie J. Morgan associated with Docket No. 2006-97-WS as well as information provided by the South Carolina Office of Regulatory Staff, which is referenced in Section III. Exhibit GCH-5 contains excerpts from a previous valuation study I performed for this utility. Exhibit GCH-5 is referenced in Section IV of my testimony. Exhibit GCH-6 contains two FPSC orders that establish leverage formulas for calculating return on equity as well as the proposed methodology for the current year, which I use in Section VI.

Q. Did you or people under your direct supervision perform the analysis referenced in your following testimony?

A. Yes. I have several professionals who report directly to me. They performed the work under my direct supervision, and I reviewed and approved all work product.

Q. What is the overall revenue recommendation of the City of Tega Cay?

A. The combined recommendation of the City of Tega Cay produces a revenue requirement decrease for water operations of $12,494 and a revenue requirement decrease for sewer operations of $114,778 from the total Test Year service revenues proposed by TCWS; Return on Rate Base decrease of 0.61% for water and 0.62% for sewer; and net income decrease of $2,405 for

water and $16,018 for sewer, as summarized on Exhibit GCH-2, Schedule 11.

I. Background

Q. Would you please provide some background to this proceeding?

A. Yes. TCWS is a public utility company providing water and wastewater service to approximately 1,645 water and 1,550 wastewater customers in York County, South Carolina, as of the year-end 2008. Pursuant to the South Carolina Code, TCWS has requested the Commission approve a water and sewer rate adjustment in user rates and charges as set forth in the case filing application. TCWS set the revenue requirement higher than necessary, and I discuss necessary reductions in my testimony here today. It should be noted that I reserve my right to modify and provide additional adjustments based on my review and analysis of the discovery responses provided by TCWS on June 7, 2010 as well as any direct testimony filed on June 8, 2010 or thereafter.

II. Inflation / Consumer Price Index Adjustments

Q. Please discuss your findings related to inflation and CPI adjustments.

A. TCWS's rate case filing uses a 5.69% CPI to escalate certain expenses, which according to testimony by Steven Lubertozzi of Utilities, Inc. is the reported increase of water and sewer maintenance costs since the last rate case, as per the U.S. Department of Labor Bureau and Labor Statistics. However, the last rate case was filed in 2006, while operation and maintenance (O&M) costs shown in the filing's financial statements are for 2008. As such, the percentage needs to be adjusted to

reflect the period from 2008 to present.

In the current economic environment, a CPI adjustment of 5.69% is unrealistic. If the Commission is to consider any adjustment, as a basis, I recommend using an inflationary index for water and wastewater utilities. Since March 31, 1981, the Florida Public Service Commission (FPSC) has established a price index increase or decrease for major categories of operating costs on an annual basis. As determined by FPSC Order No. PSC-10-0082-PAA-WS (Exhibit GCH-3), the recommended annual index for 2009 is 2.55% and for 2010 is 0.56%. Combining these results in a total increase of 3.12% needed to bring 2008 cost information forward to the present. This means that expenses in the filing that were adjusted by the 5.69% CPI are 2.57% too high, and must be adjusted down accordingly, as shown in Exhibit GCH-2 on Schedules 1 and 2. This represents a decrease in requested O&M expense levels of $2,768 for water and $7,746 for sewer.

III. Non-account Water and Excessive Water Loss

Q. Please discuss your findings related to Non-account Water and Excessive Water Loss.

A. During the last rate case proceeding for TCWS, an issue arose relative to the non-account water and excessive water loss. Based on the Sur-rebuttal Testimony of Willie J. Morgan, employed by the State of South Carolina Office of Regulatory Staff as the Program Manager for the Water and Wastewater Department, in Docket No. 2006-97-WS, the water losses for the Test Year Period were approximately 13.4% (See Exhibit GCH-4).

Typical industry guidelines define the acceptable annual amount of water loss to be 10% or less. There are several references for this value. The American Water Works Association (AWWA) benchmarking report was 8.9% for the Southeast Region through that period. Based on the 13.4% water loss during the previous rate case Test Year, excess water loss equated to a minimum of 3.4%.

Requests have been made to update these calculations for the 2008 Test Year. Based on the initial limited information provided to the South Carolina Office of Regulatory Staff by TCWS, further information and analysis is required to complete the water loss calculation for the Test Year.

As excessive water loss has been an issue historically, I have included it in my recommended adjustments to the TCWS filing utilizing the percentage identified in the previous rate case of 3.4%. Certain O&M expenses are inflated as a result of this excessive water loss. O&M expenses related to maintenance, power, chemicals, and other miscellaneous services and charges should be reduced by the current percentage of excessive water loss shown above, in order to reflect the appropriate O&M expense levels. This normalization of expenses results in a decrease in requested O&M expense levels of $5,891, as shown in Exhibit GCH-2 on Schedule 1. It should be noted that this adjustment was taken subsequent to the adjustment for inflation. I reserve the right to update this excessive water loss calculation as additional information is received and analyzed.

IV. Inflow & Infiltration (I&I)

Q. Please discuss your findings related to sewer inflow & infiltration.

A. Historically, the TCWS sewer system has been shown to have excessive I&I. In a valuation study, I (Hartman & Associates) performed in March 1999, excerpts of which are attached as Exhibit GCH-5, it was shown that for 1997 the excessive I&I level was 19.3% and 26.7% in 1998, for an average of 23.0% I&I above and beyond expected levels. In our research and analysis, it has become apparent that TCWS has not made significant headway with the wastewater collection system to combat this excessive I&I, and as such the system currently is expected to still have excessive I&I. Note, as with excessive water loss, I have not yet received the requested information from TCWS to calculate the I&I for 2008, I reserve the right update this percentage at a later date once the information has been provided and analyzed. Based on the average I&I percentage of 23.0%, O&M expenses are inflated as a result of processing this excess. I have determined that O&M expenses related to maintenance, power, chemicals, and other miscellaneous services and charges should be reduced by the current percentage of excessive I&I shown above, in order to reflect the appropriate O&M expense levels. This normalization of expenses results in a decrease in requested O&M expense levels of $81,486, as shown in Exhibit GCH-2 on Schedule 2. It should be noted that this adjustment was taken subsequent to the adjustment for inflation.

V. Capital Improvements

Q. Please discuss your findings related to capital improvements.

A. Adjustments made to Gross Plant in Service for rate base calculations were compared against pro forma projects listed in direct testimony by Steven Lubertozzi of Utilities, Inc. and were found to match. I have no reason at this time to dispute these adjustments, as the testimony stated these projects have all been completed. I do, however, reserve the right to readdress this issue if it is determined that included pro forma projects are not actually in service or if the final costs differ from those that were included in the TCWS filing. Again, as with excessive water loss and I&I, this information (which should be available if completed) has not been provided by TCWS.

VI. Return on Rate Base / Return on Common Equity

Q. Please discuss your findings related to return on rate base and return on common equity.

A. The maximum Return on Rate Base is calculated based on a weighted average of debt to equity and the associated costs or rate of return associated with each. TCWS used a Return on Rate Base of 8.98%. I note several considerations below for lowering this maximum rate of return to 8.36%, which results in an additional decrease of requested net operating income of $18,423. Calculations for these considerations are detailed in Exhibit GCH-2, Schedule 7.

During my research, I found that South Carolina's Public Service Commission, along with the South Carolina Office of Regulatory Staff (ORC), uses the FPSC guidelines as a standard for useful service lives, depreciation of assets, and several other categories. As such, it was

determined that the FPSC would be a reliable and adequate basis to use as a reference, where possible.

Florida Statutes authorize the establishment, not less than once each year, of a leverage formula to calculate a reasonable range of returns on equity (ROE) for water and wastewater utilities. Initially filed on May 8, 2008, and receiving final approval through Order No. PSC-08-0846-FOF-WS (Exhibit GCH-6) on December 31, 2008, the FPSC's leverage formula for 2008 was:

Return on Common Equity = 7.36% + 2.123/Equity Ratio

where: Equity Ratio = Common Equity / (Common Equity + Preferred Equity + Long-Term and Short-Term Debt)

The reasonable range of returns on equity for water and wastewater utilities for 2008 was determined to be:

Range: 9.48% @ 100% equity to 12.67% @ 40% equity

This leverage formula depends on four basic assumptions:

1) Business risk is similar for all water and wastewater utilities;
2) The cost of equity is an exponential function of the equity ratio;
3) The marginal weighted average cost of investor capital is constant over the equity ratio range of 40 percent to 100 percent; and
4) The debt cost rate at an assumed Moody's Baa3 bond rating, plus a 50 basis point private placement premium and a 50 basis point

small utility risk premium, represents the average marginal cost of debt to a water and wastewater utility over an equity ratio range of 40 percent to 100 percent.

For these reasons, the leverage formula is assumed to be appropriate for the average water and wastewater utility. Additionally, a comparison using the 2008 FPSC leverage formula percentage (11.91% based on 46.7% equity) as a test against the TCWS return on common equity used in the present filing (11.7%) to determine the required return on rate base showed that the rate of returns for ROE were very close, which indicated that the FPSC formulas could be used as a basis for moving forward.

On July 19, 2009 the FPSC issued Order No. PSC-09-0430-PAA-WS (Exhibit GCH-6) approving the updated leverage formula for 2009. The leverage formula methodology was applied using 2009 financial data, and was calculated as follows:

Return on Common Equity = 8.58% + 1.087/Equity Ratio

Range: 9.67% @ 100% equity to 11.30% @ 40% equity

The result of applying the 2009 leverage formula to TCWS's equity was a return on common equity of 10.91%, a 1.0% drop from the previous year.

The FPSC has recently issued its initial recommendation for the leverage formula for 2010 as follows:

Return on Common Equity = 7.46% + 1.356/Equity Ratio

Range: 8.82% @ 100% equity to 10.85% @ 40% equity

The result of applying the 2010 example leverage formula to TCWS's

equity is a return on common equity of 10.36%, a 0.55% drop from the previous year.

This rate of return was then used in rate base equity calculations, shown in Exhibit GCH-2 Schedules 5, 6, and 7, to arrive at the aforementioned maximum total of 8.36% return on rate base, representing a decrease of requested net operating income of $18,423. I reserve the right to conduct further analysis concerning this topic. I would expect that the final result return on rate base would be less than 8.36%.

VII. Overall Recommendation

Q. Please discuss the overall revenue recommendation of the City of Tega Cay.

A. Based on the adjustments I have discussed in this testimony, I recommend that the proposed operating revenues be adjusted down by $127,272 from what was submitted by TCWS, leading to a net income decrease of $18,423 from the TCWS proposed income statement as summarized from Exhibit GCH-2, Schedule 3.

Q. Does this conclude your Direct Testimony?

A. Yes.

End of Testimony